IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| 10,25 | | | | | |
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| In re application of: | 1 | Confirmation No.: NYA | | | |
| Fuyong Zhao |) | | | | |
| Serial No.: 10/645,255 |) | Examiner: NYA | | | |
| |) | Group Art Unit No.: NYA | | | |
| Filed on: August 20, 2003 |) | | | | |
| For: ADAPTIVE, DETERMINISTIC ANT RONETWORK ROUTING INFORMATION | | ROACH FOR UPDATING | | | |
| Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 | | | | | |
| INFORMATION DISCL | OSURE STA | TEMENT | | | |
| Sir: | | | | | |
| Enclosed is a copy of Information Disclos | sure Citation F | orm PTO-1449 together with | | | |
| copies of the documents cited on that form. It is | respectfully re | quested that the cited documents | | | |
| be considered and that the enclosed Information I | Disclosure Cita | ation Form PTO-1449 be initialed | | | |
| by the Examiner to indicate such consideration ar | nd a copy there | eof returned to applicant(s). | | | |
| Pursuant to 37 C.F.R. § 1.97, the submissi | ion of this Info | ormation Disclosure Statement is | | | |
| not to be construed as a representation that a search | ch has been m | ade and is not to be construed as | | | |
| an admission that the information cited in this sta | tement is mate | erial to patentability. | | | |
| Pursuant to 37 C.F.R. § 1.97, this Informa | ition Disclosur | re Statement is being submitted | | | |
| under one of the following (as indicated by an "X | " to the left of | f the appropriate paragraph): | | | |
| X 37 C.F.R. §1.97(b). | | | | | |
| 37 C.F.R. §1.97(c). If so, then to one of the following: | this Informatio | on Disclosure Statement includes | | | |
| A statement pursua | A statement pursuant to 37 C.F.R. §1.97(e) | | | | |
| | | hereby states that each item of ation disclosure statement was first | | | |

cited in communication from a foreign patent office in a counterpart

| | foreign application not more than three months prior to the filing of this information disclosure statement. |
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| | 1.97(e)(2) The undersigned hereby states that no item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this information disclosure statement. |
| | A check for \$180.00 for the fee under 37 C.F.R. § 1.17(p). |
| 37 C.F.R. the follow | §1.97(d). If so, then this Information Disclosure Statement includes ving: |
| | A statement pursuant to 37 C.F.R. §1.97(e) |
| | 1.97(e)(1) The undersigned hereby states that each item of information contained in this information disclosure statement was first cited in communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement; OR |
| | 1.97(e)(2) The undersigned hereby states that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this information disclosure statement. |
| | AND |
| | A check for \$180.00 for the fee under 37 C.F.R. §1.17(i) for submission of the Information Disclosure Statement. |
| | . §1.97(i). Wherein applicants are submitting references before the patent to be placed in the file but not considered by the Patent office. |
| 1449 | ordingly, copies of the references as listed on the attached Form PTO are submitted herewith for placement in the file. No certification or are deemed necessary. |

Throughout the pendency of this application, please charge any additional fees, including any required extension of time fees, and credit all overpayments to deposit account 50-1302. A duplicate of this sheet is enclosed.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: February 2, 2004.

Reg. No. 50,266

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 3, 2004

(Date of Deposit)

Jennifer Newell

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| Subsetting for Form 1449A/PTO (Modified) (use as many sheets as necessary) | Attorney Docket No.: 50325-0802 | Application Number: 10/645,255 |
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| FEB O 5 2004 5 | First Named Inventor: Fuyong Zhao | |
| | Filing Date: August 20, 2003 | |
| 77, 70, 70 | PATENT LITERATURE DOCUMENT | rs |

| Examiner Initials* | Cite No ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | Translation |
|-----------------------|-------------------------|--|-------------|
| | | S. Murphy, et al., "OSPF with Digital Signature," June 1997, Network Working | |
| | | Group, Request for Comments: 2154, | |
| | \ | http://www.ietf.org/rfc/rfc2154.txt?number=2154, data retrieved 12/8/03, | |
| | | pp. 1-28. | |
| - | | David L. Mills, "Network Time Protocol (Version 3), Specification, | |
| | | Implementation and Analysis," March 1992, Network Working Group, Request | |
| | | for Comments: 1305, http://www.ietf.org/rfc/rfc1305.txt?number=1305, data | |
| | | retrieved 12/8/03, pp. 1-107. | |
| | | Y. Rekhter, et al., "A Border Gateway Protocol 4 (BGP-4)," March 1995, | |
| | ¢ | Network Working Group, Request for Comments: 1771, | |
| | | http://www.ietf.org/rfc/rfc1771.txt?number=1771, data retrieved 6/5/03, | |
| | | pp. 1-54. | |
| | , | Gianni Di Caro, et al., "AntNet: Distributed Stigmergetic Control for | |
| | | Communications Networks," Journal of Artifical Intelligence Research 9, | |
| | | submitted 5/98, published 12/98, pp. 317-365. | |
| | | Marco Dorigo, et al., "The Ant System: Optimization by a colony of | |
| | A. | cooperating agents," IEEE Transactions on Systems, Man, and Cybernetics-Part | |
| | " | B, Vol. 26, No. 1, 1996, pp. 1-26. | |
| | | Ruud Schoonderwoerd, et al., "Ant-Based load balancing in | |
| | " | telecommunications networks," undated, pp. 1-26. | |
| | | | |
| | | Felix Cho Zhao, Cisco Systems, Inc., "ANTD: An Adaptive, Deterministic Ant | |
| | 6 | Routing Algorithm," 2003, Document Number: EDCS-255496, pp. 1-38. | |
| - | | Eric Bonabeau, et al., "Swarm Smarts," Scientific American, March 2000, pp. | |
| | | 72-79. | |
| | | Dimitri Bertsekas, et al., "Data Networks," Prentic Hall, 1992, pp. 365-369 and 393-400. | |

| Examiner | Date Consider | |
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| Signature | | |

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| Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary) | | | Attorney Docket No.: 50325-0802 | | | |
|--|--|---|---|--------------|---|--|
| FEB 0 5 200 | VC26 34 | | First Named Inventor: Fuyong Zhao Filing Date: August 20, 2003 | | | |
| Recognition | 7 | OTHER ART – NO PATENT | LITERATURE DOCUMENTS | <u> </u> | | |
| Examiner Initials* | Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the | | | | | |
| | Andrew S. Tanenbaum, "Computer Networks," Second Edition, Prentice Hall, 1996, pp. 345-365. | | | | | |
| | | Malvin H. Kalos, et al., "Monte Card pp. 1-3 and 129-140. | ol Methods, Volume I: Basics," | 1986, | | |
| | | Richard Bellman, "Dynamic Programming," Princeton University Press, Princeton, NJ, 1957, 362 pages. | | | | |
| | | C. Hedrick, "Routing Information Protocol," June 1998, Network Working Group, Request for Comments: 1058, http://www.ietf.org/rfc/rfc1058.txt?number=1058 , data retrieved 1/14/04, pp. 1-31. | | | | |
| | | J. Moy, "OSPF Version 2," July 1991, Network Working Group, Request for Comments: 1247, http://www.ietf.org/rfc/rfc1247.txt?number=1247 , data retrieved 1/14/04, pp. 1-76. | | | | |
| | | Bruce Davie, et al., "MPLS Technology and Applications," Morgan Kaufamann Publishers, 2000, 301 pages. | | | | |
| | | E. Crawley, et al., "A Framework for August 1998, Network Working Gro http://www.ietf.org/rfc/rfc2386.txt?n pp. 1-35. | up, Request for Comments: 238 | 36, | - | |
| | | G. Apostolopoulus, et al., "QoS Rous August 1999, Network Working Gro http://www.ietf.org/rfc/rfc2676.txt?npp. 1-47. | up, Request for Comments: 267 umber=2676, data retrieved 1/1 | 76, 4/04, | | |
| | | J. Moy, "OSPF Version 2," July 199 Comments: 2178, http://www.ietf.orgretrieved 12/8/2003, pp. 1-197. | • | - | | |

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| Avre roest | | OTHER ART – NO PATE | ENT LITERATURE DOCUMENT | S | | |
| Examiner Initials* | Cite No ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | | | Translation ² | |
| | | Shigang Chen, et al., "Distributed Quality of Service Routing in High-Speed Networks Based on Selective Routing," IEEE, 1998, pp. 80-89. | | | | |
| | | Kang G. Shin, et al., "Distributed Route Selection for Establishing Real-Time Channels," August 30, 1999, pp. 1-29. | | | | |
| | | Hussein F. Salama, et al., "A Dis Unicast Routing," IEEE, 1997, 8 | • | Constrained | | |
| | | Shigang Chen, et al., "An Overvi Generation High Speed Networks | • | _ | | |
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